



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/501,629 | 07/15/2004 | Nadejda G Gurskaya | EVRO/0006 | 9951 |

7590 03/02/2007
B. Todd Patterson
Moser, Patterson & Sheridan
3040 Post Oak Blvd.
Suite 1500
Houston, TX 77056

| |
|----------|
| EXAMINER |
|----------|

MONSHIPOURI, MARYAM

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

1656

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 31 DAYS | 03/02/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|--------------------------------|---------------------------------|--|
| Office Action Summary | Application No. 10/501,629 | Applicant(s) GURSKAYA ET AL. | |
| | Examiner Maryam Monshipouri | Art Unit 1656 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 24-33 is/are pending in the application.
- 4a) Of the above claim(s) 8-13, 15-17, 19-20, 26-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-7, 14, 18, 21, 24, 25, 29 and 31-33 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1656

Applicant's response to lack of restriction requirement filed 12/12/2006 is acknowledged. Applicant elected Group I (claims 1-7, 14, 18, 21, 24-25 and 29, directed to nucleic acids encoding SEQ ID NO:2 variant with a substitution at position 222) with traverse. It is noted that claims 31-33 which should have been grouped into Group I have been excluded from the previous office action due to inadvertent error. The examiner regrets any inconveniences that said error may have caused applicant.

Claims 8-13, 15-17, 19-20, and 26-28 are withdrawn as drawn to non-elected invention.

In traversal of restriction requirement applicant argues that (1) Groups I and II are proteins and DNA encoding them are closely related and possess a technical relationship involving one or more of the same or corresponding technical features. Therefore no burden of searching would exist if they are examined together.

(2) Technical relationship of inventions of Groups 1-3, are misidentified as different optical properties instead of fluorescent properties, which is common to all groups. Therefore, according to applicant, all the product claims in the present application have the major common feature which is fluorescent ability and need not be restricted under lack of unity.

These arguments were fully considered but were found unpersuasive. In response to applicant's **first** argument it should be noted that relatedness is not the criteria under which withdrawal of restriction can occur. Further, even if it was, the special technical features of Group I is DNA encoding wild type SEQ ID NO:2, but the special technical feature of Group II invention is mutated protein with different and

Art Unit: 1656

unique fluorescent properties. Therefore, in contrast to applicant's view, said special technical features have hardly anything in common.

With respect to applicant's **second** argument the examiner maintains that each mutated proteins of Groups 1-3 are each capable of being used independently and separately from the others because of their unique optical properties rendering each product patentable over the other. Applicant again is well aware that if said products had identical fluorescent properties there would have been no point in investing time and effort in preparing three separate SEQ ID NO:2 mutants. Therefore, as explained previously in view of the fact that optical (or specific fluorescence) properties of each mutant protein is different said products remain to lack a common technical feature and in contrast to applicant's view, misidentification of special technical feature of Groups 1-3 inventions remain to correct.

In summary, with respect to the response provided above, in addition to those provided previously, restriction is maintained and is hereby made **final**.

Upon review of the previous office action further restriction deemed necessary as following:

The invention of Group I is directed to the following patentably distinct species of unrelated structure:

Claims 1-7, 14, 18, 21, 24-25, 29, 31-33 are generic to the following **616 disclosed patentably distinct species** of mutants with single , double, triple and more mutations such as:

DNA encoding SEQ ID NO:2 with E222G mutation further comprising V11L,

Art Unit: 1656

DNA encoding SEQ ID NO:2 with E222G mutation further comprising V11L and N19D,

DNA encoding SEQ ID NO:2 with E222G mutation further comprising V11L, N19D and F64L,

DNA encoding SEQ ID NO:2 with E222G mutation further comprising V11L, N19D, F64L and V68A,

DNA encoding SEQ ID NO:2 with E222G mutation further comprising V11L, N19D, F64L, V68A, K101E,

DNA encoding SEQ ID NO:2 with E222G mutation further comprising V11L, N19D, F64L, V68A, K101E, E115K

etc.

The additional remaining species are not spelled out for the purpose of brevity.

*Applicant is requested to specify the amino acid composition of each elected species in all amino acid positions and kindly set forth a specific sequence identifier number corresponding to said species. Applicant is also requested to identify the sequences which read on the elected species in claim 3 to be fully responsive to this office action. It should additionally be reminded that **up to ten** species or sequences will be examined in a single application.*

The species are independent or distinct because they have unrelated and distinct structures. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed. Applicant is advised that a reply to

Art Unit: 1656

this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

MPEP § 809.02(a).

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions

Art Unit: 1656

unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maryam Monshipouri whose telephone number is (571) 272-0932. The examiner can normally be reached on 7:00 a.m to 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleene Kerr Bragdon can be reached on (571) 272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

M. Monshipouri

Maryam Monshipouri Ph.D.

Primary Examiner